EASEMENT REFUGES IN DISTRICT 4A

CLEARWATER LAKE NATIONAL WILDLIFE REFUGE.

I. GENERAL.

This area was visited on April 30, at which time the ice was out of the lake and all run-off had occurred. This lake is spring-fed and water levels should remain satisfactory during the coming summer.

II. WILDLIFE.

There were an estimated 225 ducks present on the lake at the time of the visit. The major species represented was Lesser Scaup followed by Mallards and Pintails with a fair representation of all other common species.

Also observed were ten Horned Grebes.

One trapping permit was issued to a local trapper during the State Trapping Season. The following animals were removed by the trapper during the season; 87 Muskrats, nine Mink, six Weasels, 13 Skunks, and three Badgers.

III. PHYSICAL DEVELOPMENTS.

There are no water control structures at this easement. All refuge signs and markers have been shot up and will be replaced later in the summer.

SHELL LAKE NATIONAL WILDLIFE REFUGE.

I. GENERAL.

This easement was also visited on April 30. The ice was out of the lake and the major run-off had occurred. Water levels are about the same as one year age and should remain satisfactory during the summer.

II. WILDLIFE.

There were an estimated 200 birds present on Shell Lake at the time of the visit. Lesser Scaup were the major species present but there was a good showing of Mallards and Pintails.

Lands in this area are farmed to the edge of the lake and upland game birds are seldom observed.

Also observed were Willets, and one Great Blue Heron.

III. PHYSICAL DEVELOPMENTS.

There are no water control structures at this easement. Some time is needed to replace numerous shot up refuge signs and markers.

LAKE ZAHL NATIONAL WILDLIFE REFUGE.

I. GENERAL.

This area was visited on March 20 and again on April 30. The lake was still frozen over during the visit on March 20, but was ice free on April 30 and all run-off had occurred. Water levels are low in this lake with the present level about eleven inches below spillway crest.

II. WILDLIFE.

There were approximately 700 ducks present on April 30, of which fifty percent were Lesser Scaup. All other common species were present with the exception of Cadwall, Baldpate, and Green-winged Teal.

Also observed were Dowitchers, Marbled Godwits, and Willets.

A colony of beaver have built a large lodge in the center of the dike at this easement. The only trees for miles around were growing on the dike and the beaver have removed all except those around which the lodge is built.

III. Three trapping permits were issued to local land-owners during the State Trapping Season and the total numbers of animals removed were 535 Muskrats, 28 Mink, two Weasel, and one Skunk.

III. PHYSICAL DEVELOPMENTS.

The dike at this easement needs some repair work and we hope to accomplish this job in the next Fiscal Year.

The Government has purchased an additional 745 acres at Lake Zahl which will require some fencing in the next Fiscal Year.

Building up washed out dike with D-4

Job completed; rip-rap placed; waiting for run-off

After run-off; approximately 18" of water held back



Refuge trail overgrown by willow.

Same view after clearing brush from trail.

Sharp-tailed Grouse flushed from waste grain at headquarters.



Knudson Barn before dismantling.

First step - ends knocked out, eaves sawed off.

Roof was cut in 83ft. sections and loaded on truck.



All down but one wall.

Complete building loaded and ready for transfer to Lake Ilo.

Trespass cattle in heavy stand of Quack Grass.



One of the many dry potholes.

Beaver lodge in Iverson Lake on north end of refuge.

One of our new wooden recognition signs.



MK.

Long-tailed Weasel trapped in cellar window well, Quarters #1.

He ran up the window screen and tried to jump out - did not succeed.

Chew time for "Porky".



Beaver lodge in dike at Lake Zahl Easement.

Close up of same beaver lodge.

Overall view of Lake Zahl Refuge from the Southwest.



MONTHS OF January to April , 19 58

(1) Species		2) grants Seen	(3 Peak Conc		,	4) rants Seen	Vound	(5) Produced	(6)
(e) Torse	FIISC WIL	ziants seen	reak conc	Inclusive	Last Mig.	ants seen	Broods	Estimated	Estimated
Common Name	Number	Date	Number	Dates	Number	Date	Seen	Total	Waterfowl Days
	breeding	habitat.		aving no b	asis in fa	pluoda 🕏	pe omitt	ag ·	
1. Swans: Whistling swan	Es 5 mato	4/25	ood counts	4/25-28	nade on tw	4/28	areas ag	gregating 10	
111111111111111111111111111111111111111	Estanato	DESCRIPTION	Nonvil h Log	TOTA, SELECT	On observ	a tich and	actual c	counts on re	presentative ₈
2. Geese:	The last	reinge rec		species d	SO Suring	reporting	periog		
Canada goose	44	3/27			50	4/18			116
Cackling goose Brant	3							-	
White-fronted goose	150	4/22	1 inclusive	dates whe	600	4/23	the spec	ies occurre	750
Snow goose	INTE COT	mun goes no		resident s	Decree-				
Blue goose	The firs					reporting	bering'	and the pum	
7 Duelee								*	
3. <u>Ducks</u> : Mallard	25	3/20	700	4/20-50	onel signi	ficance.			12,900
Black Duck		t be did sp	ould be add		opriate sp	abes occur		einge durin milon shoul	I he
Gadwall	In Soldit	4/28	50	4/80	nther sne	TABLE COURT	Ting on	sofnes during	125
Baldpate	4	4/28	150	4/30	12 (3ee 2	ec. 7552,	MITGITTE	Kaluges Fie	1,450
Pintail	9	3/20 4/21	15	4/24-30					9,500
Green-winged teal Blue-winged teal	12	4/30	12	4/80			}	John E.	420
Cinnamon teal		1/00		A Re	ported by	harran		na vasala	
Shoveller	2	8/31	150	4/24-30	pries this	period	4 - d	of refuge o	2,425
Wood duck		/				**	•	2	
Redhead	11	4/28	150	4/28-30	ting arous	this seas	ou		1,050
Ring-necked duck Canvas-back	6	4/25	150	4/30					750
Scaup	8	5/31	3 50	4/28-50					5,950
Golden-eye				is csan is?	Colleguera	PEN SUOT	ores sea	75. VILOSES*	
Buffle-head	1	4/28	4	4/80	200	427			18
Ruddy duck		9		waterfow	mumbers_			1 458	
Geese					il days us	during p	Tiod 5	1,478	
4. Coot: Conceros	7	4/30	7	4/30					7
3-1750				(over)					Form NR-1

(Aug. 1952)		SUMMARIES	S The Manuacy of the Control of the		
Total Production:	7 4/80		CONTRACTOR		Form NR-1
Geese		Total waterfor	wl days use during peri	iod 88,475	
Ducks		Peak waterfow	l numbers	2,458	
Coots	1 4/28	Areas used by	concentrations All op	on water areas.	73
Canvas-back Scaup	0 4/35	180 4/28-20			8,950
Redhead Ring-necked duck	11 0/88		ting areas this season_		2 10410
Shoveller Wood duck	8 8/83	TRO W OVI. W. I		W 00	
Blue-winged teal Cinnamon teal	18 4/80		ories this period 6 ported by		4120
Green-winged teal	8 6/21	15 6/80		John R. Fr	490
Baldpate	4 6/88	INSTRUCTION	NS (See Sec. 7532, Wil	ldlife Refuges Field	Manual)
(1) Species:	reporting period sho		other species occurring opriate spaces. Special onal significance.	-	
(2) First Seen:		cord for the species of apply to resident s	during the reporting pepecies.	eriod, and the number	seen.
(3) Peak Concentra- tion:	Estimated number and	d inclusive dates when	n peak population of th	ne species occurred.	
(4) Last Seen:	The last refuge rec	ord for the species d	uring the reporting per	riod.	
(5) Young Produced:	breeding areas. Bro	ood counts should be	on observations and ac made on two or more are asis in fact should be	eas aggregating 10% o	
(6) Total:			pulation X no. of days ildlife Refuges Field N		or re-
				101	

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

WATERFOWL

REFUGE Clearuster Lake Easement Refuge

MONTHS OF January to April , 19 53 careful attention pince these data are necessarily based on an analysis of the rest of the form.

(1)	historie (2)	(3	phonid be	10000 1	4)	1	(5)	(6)
Species		grants Seen		,	,	•	Young	Produced	
Common Name	Number	Date	Number	Inclusive		Date	Broods Seen	Estimated Total	Estimated Waterfowl Days
1. <u>Swans</u> : Whistling swan		areas Br		should be	nade on tw	o or more	areas ag	counts on regregating 10 ed.	presentative F of the
2. Geese: Canada goose Cackling goose Brant		refuge rec	7	4	e		-	Cles Occurre	
White-fronted goose Snow goose Blue goose	This col	mn does no	appiy to	resident s	pecies.			and the num	
3. <u>Ducks</u> : Mallard Black Duck Gadwall	reportin	ton to the g period sh those speci	pald bgg	4/30	opriate sp	rces gbe		refuge duria ention shoul	
Baldpate Pintail			41	4/80	NS (Bee S	se, 7532,	Midlifè	Refuges Fie	350
Green-winged teal Blue-winged teal Cinnamon teal		4	14	4/30	ported by_			70)m E	50 125
Shoveller Wood duck Redhead		_10	11	4/30	pries this		1 2	of refuge c	90 2Ve red
Ring-necked duck Canvas-back			16	4/30	ting areas	this seas	211		150
Scaup Golden-eye			82	4/30					700
Buffle-head Ruddy duck			4	4/30		tions All	ONDE MAI	or erem.	60
Geese			Tota	al waterfor	al days us	during p	riod	7*070	
4. Coot: agreered: 3-1750				DOWNWATER	referred Stanson				Form NR-1

(Aug. 1952)

(over)

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

Estimated waterfowl days use (average population X no. of days present) of refuge for re-

MONTHS OF Jenuary to first 19 55

porting period based. (See Sec. 7532, Wildlife Refuges Field Manual.)

WATERFOWL

(6) Total:

WATERFOWL

careful attention since these data are necessarily based on an analysis of the rest of the form.

WATERFOWL
REFUGE Shell (McAlmond) Lake Easement Refuge MONTHS OF January to April , 1958

(Aug. 1952)

Mare and corama abl	plicable b	o cus rebor	erus herten	should be	used: It	is desira	ole that	the Summeri	BE LECEIVE.
(1) Species		2)	Pack Cons		And the second s	4)	V-1713-	(5)	(6)
		grants Seen	3 10 0		THE RESERVE THE PARTY NAMED IN	rants Seen		Produced	Datimated
Common Name	Estimate	Materfowl	days use (Inclusive	The second secon	no. of da.	Broods	Estimated	Estimated
Common Name	Number	Date	Number	Dates	Number	Date	Seen	Total	Waterfowl Days
1. Swans:		habitat.	Estimates h				be omitt		
Whistling swan		areas. Br				i		gregating 10	
willstilling Swall	Estimate	A number of	young prod	seed based		stions and	actual.	counts on re	presentative
2. Geese:	ware coming	relugo rec		nharran a		Cabararup I	hav many		
Canada goose	The last	refuge rec	and for the	apecies d		reporting ;	pariod		
Cackling goose							3		
Brant	DO CYMUZ CO	M PERSONAL CYCL	**********	MOLOD HILO	home hab	TERRETAIL OF	ana pha	cies occurre	
White-fronted goose	Fatimata	I number and	A inclusive	dates when		Tation of	the ene	ries occurre.	
Snow goose	THE CAT	mn does no	SEPTA OF	LESTMONT S		· 12			
Blue goose						reher crue	hourne.	and the num	no: weetts
(9) Einet Seen.	The fire	L Dodine vo	nord for th	a species		Third of any	seriod	need dien man	NOT WORK
3. Ducks:	STAGU TO	those spec	TOP OF TOPS	and Wall		TTORHOR!			
Mallard		g period shi					erar med	ention shoul	100
Black Duck	THE BURET P	ton to the	OTION TINGO	T OUT TALEM				reiuge durin	
Gadwall	Ter made w	Lon to the	5	4/30	KEPYN BAS			me from a drown in	50
Baldpate				OT LOSQUICUT	c aac) cw	ed loos	WITGITT	Refuges Fie	re managel
Pintail			50	4/30	10 10 0	a a a a a	11.5 1 72.1 1 %	Darker Pisa	350
Green-winged teal				2.425					
Blue-winged teal			15	4/30	ported by_			gopti 8	15
Cinnamon teal		_	. No.	of invent		bellog	7 8	of refuge o	
Shoveller			1						the section of the se
Wood duck		to	•				_		
Redhead			PTL	ucibal nes	ting areas	this seas	9U		
Ring-necked duck		4							
Canvas-back			10	4/30					70
Scaup			100	4/30					700
Golden-eye			Are	sa naeg ph		Froma Town	about ass	DEL ELEGIS AN	Shell Lake.
Buffle-head						7.6			
Ruddy duck			Pea	waterfow				rao	2. Viuyta
	1 2								
Geese			Tot	Al Waterfo	vi days us	e during p	ariod	1,886	
4. 0	× 1								
4. Coot: ogner for:		9 . (4-1		Form ND 1
3-1750				SUMMARIES	arantesan .				Form NR-1

(over)

Total Production:	SUMMARIES FOLW NR-1
Geese	Total waterfowl days use during period 1,285
Ducks	Peak waterfowl numbers 190
Coots	Areas used by concentrations All open water areas on Shell Lake.
Canvas-back Scaup	100 6/20
Wood duck Redhead Ring-necked duck	Principal nesting areas this season
Green-winged teal Blue-winged teal Cinnamon teal Shoveller	No. of inventories this period 1 % of refuge covered 50% Reported by John R. Frye
Baldpate Fintall	INSTRUCTIONS (See Sec. 7532, Wildlife Refuges Field Manual)
(1) Species:	In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance.
(2) First Seen:	The first refuge record for the species during the reporting period, and the number seen. This column does not apply to resident species.
(3) Peak Concentra-	Estimated number and inclusive dates when peak population of the species occurred.
(4) Last Seen:	The last refuge record for the species during the reporting period.
(5) Young Produced:	Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
(6) Total:	Estimated waterfowl days use (average population X no. of days present) of refuge for reporting period based. (See Sec. 7532, Wildlife Refuges Field Manual.)
Note: Only columns and	plicable to the reporting period should be used. It is desirable that the Summaries receive

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> careful attention since these data are necessarily based on an analysis of the rest of the form.

WATERFOWL

REFUCE Sholl (Mediated) Lake Ectoront Solute. INT.-DUP. SEC., WASH., D.C.

26013

(Aug. 1952)

26013

(1)		2)	(3		,	4)		(5)	(6)
Species	First Mi	grants Seen	Peak Conc		Last Mig	rants Seen		Produced	Dating to 1
Common Name	Number	Date	Number	Inclusive	Number	Date	Broods Seen	Estimated Total	Estimated Waterfowl Days
Common Name	1011 (201		980					10041	Wateriowi Day
Swans:	breeding	The same of the sa	Batimatea h				pe omitte	d.	
Whistling swan	breading			should be	nade on tw			gregating 10	
2) managed and a second a second and a second a second and a second an	Estimato	d number of	young prod	reed hased	on observ	ations and	actual.	sounts on re	
. <u>Geese</u> :	THE TORK	reluge rec		ebectes of	eur Surin	reporting	pet.tog		
Canada goose	1000				and the			=	
Cackling goose					1 5 %				
Brant	Estimate	i number an		dates whe	peak pop	plation of	the spec	Les occurre	
White-fronted goose									
Snow goose		an does no					1 1 4		
Blue goose	The fire	t refuge re		s species i	during the	reperting	period,	and the num	
Ducks:				7 7 7 7 7				· ·	
Mallard	25	3/20	140		onal signi				800
Black Duck	ALCOHOLD A CO.				opriate ap	toes. Spe	sial atte	eiuge durin	1 110
Gadwall	In additi	ion to the		g off form,	other see	STER DOCKT	ring on	selume duran	
Baldpate	•			rum rumin to	na (pas p	pa - recet	UTTOTTE	Refuges Fle	ra werrara)
Pintail	9	3/20	100	4/80	no inve o	1200	es halls Pa	DAPENAGE TILE	600
Green-winged teal									
Blue-winged teal			5	4/30	ported by			2010	* shine
Cinnamon teal			No.	of invent	ories this	period	1	of refuge c	Me Leg
Shoveller			70	4/80					400
Wood duck Redhead				a lea				-	
Ring-necked duck			50 but	4/30	ting areas	this seas	DIJ		500
Canvas-back			50	4/30					800
Scaup		1	350	4/30			100		2,000
Golden-eye			100000						
Buffle-head		Car y		an uned by	cutosalira	- 303	DOME THE	10% ×2000°	
Ruddy duck			1 000	a wateriow	r wampere			A90	
ACT TO SECOND			13878)					See State	
Geese			Loc	il waterio	ng gala na	garrug b	eriod 1	PARE	
								1	
. <u>Coot</u> :						Charles and			Form NR-1

(over)

(Aug. 1952)	SUMMARIES
Cotal Production:	FOUR WR-L
Geese	Total waterfowl days use during period 4,405
Ducks	Peak waterfowl numbers 765
Coots	Areas used by concentrations All open water areas.
Scaup	\$200 6/20
Redhead Ring-necked duck Canvas-back	Principal nesting areas this season
Wood duck	
Blue-winged teal Cinnamon teal Shoveller	No. of inventories this period 2 % of refuge covered 50% Reported by John R. Frys
Green-winged teal	
Baldpate	INSTRUCTIONS (See Sec. 7532, Wildlife Refuges Field Manual)
(1) Species:	In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance.
(2) First Seen:	The first refuge record for the species during the reporting period, and the number seen. This column does not apply to resident species.
(3) Peak Concentra- tion:	Estimated number and inclusive dates when peak population of the species occurred.
(4) Last Seen:	The last refuge record for the species during the reporting period.
(5) Young Produced:	Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
(6) Total:	Estimated waterfowl days use (average population X no. of days present) of refuge for reporting period based (See Sec. 7532 Wildlife Refuges Field Manual)

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

INT .- DUP. SEC., WASH., D.C.

	3-17	
4	Form	NR-1A
		. 1945)

MIGRATORY BIRDS

Refuge Lostwood

(Other than waterfowl)

Months of January

III. Doves and Pigeons:
Mourning dov8.201.

		7		White-winged dove					
(1)	(2)	(:	3)	(4	4)		(5)		(6)
Species	First Seen	Peak N	umbers	Last	Seen	mind chieses—————	Production	n	Total
				1		Number	Total #	Total	Estimated
Common Name	Number Date	_Number_	Date	_Number_	_ Date_	Colonies	_Nests	_Young	Number
			- P- 2	* 001	d of ber	tendo enoi	1	Mw.	· Duck ha
I. Water and Marsh Birds:					pectes.	drebisel		Iwo.	Horned
Horned Grebe	3 4/26	25	4/30		. duable	inter reduit			Magpie
Fared Grobe	None observed to				.ber	rends each			деув. 25
Pied-billed Grebe	none opaerved c	Marco.	16-30	* 800 e	120	8			
White Pelican	50 50 50	10	4/80		012/	1		HATE	
Great Blue Heren	1 4/30	1	4/30	4 33	. 9/			a Hank	Seminacian Company
Black-orowned Night Heren			2/00	4 65	05/	8	Main H Dans	Rough-la	naoriosa.
American Bittern	1 4/22	3	4/30	5	08/	1. 1	gal.	ous Rough	3
American Merganser	4 4/10	7	4/22-25	7	4/25	-		- 200	11
Red-broasted Merganser	2 4/28	2	4/25-26	2	4/25				2
Sandhill Crane	200 4/13	1200	4/24	800	4/25			alcon.	2,000
2007 . 3. 80	orted by	Rej	7,5=00	19 04	7 20 31 /	1		200	
		1	IONS	INSTRUCT					
.U.O.A mi quong fail bas	ist, 1981 Edition	Lidoerio U.	O.A edt n	i bound i	s senso J	ne correc	. Use t	ecies:	
to the birds listed on	co. In addition	e literati	seagull",	" es ente	general t	blovA .	order		
II. Shorebirds, Gulls and	holvey bill roger	adt anisu	o aguler	urring on	ecies poc	other sp	form,		
Terns: isk bas isool 1	those species o	be given t	n should	attentio	Special	e spaces.	print		100
(Killdeer bas semioliimo	1 4/1	50	4/80	I. Water	Groups:	ficance.	ingle		75
Upland Plover	None observed to	- 13 fa 2 2 2 2 1 1 1	Diebite	II. Shore				240	10
Willet	1 4/28	11008 500	4/29-50	II. Doves	I				8
Greater Yellow-lege	None observed to	the state of the s	113 8H080	EV. Preda					
Lesser Yellow-legs	10 10	1 99	7.86						
Baird's Sandpiper	1 4/30	or thorse	4/30	edl mgl	ge recard	rier teri	l eff	rst Seen:	(S) 1
Dowltcher	8 4/30	8	4/30						8
Marbled Godwit	12 4/30	12	4/30	the speci	lo redmin	reatest r	edT :at	ak Number	12 (3)
Avocet	2 4/30	2	4/30				*		2
Walson's Phalarope	5 4/30	ring the s	4/30	for the	broser e	ast refug	edT	st Seen:	J (4) 5
Ring-billed Gull	3 4/18	500	4/25-30				LS MAL		500
Franklin's Gull . etauco	180 9 6 4/25	700	4/28-50	mg produ	er of you	mun beja	Esti	nollouber	700
			Triffin S						
	b dur ne the p	ng the rel	su seise	s edf lo	il me	sated tot	Esti	otal;	
82558			(over)	Gui Sin T		.0	Washington, D.	ting Section,	Intertor-Dupiles

(1)	(2)	(:	3)	(4)	(5)	(6)
III. <u>Doves and Pigeons</u> : Mourning dove White-winged dove	None observed to	date.	DRY BIRDS A waterfo Months o	MIGRAT	Refuge Leavy ped	Form NR-1A (Nov. 1945)
IV. Predaceous Birds:	en Pro	(4) Last S	eted	en Peek Num	(1) (2) ecies	R
Golden eagle	Resident species	redmuher	Date	Date Number	on Name Number	mmoD 5
Duck hawk Horned owl Magpie Rayen	None observed to Resident species Winter resident. None observed.	31.4	4/30	4/26 25	d Marsh Sirds:	18 78 10 T
Crow Cooper's Hewk Swainson's Hawk American Rough-legged Ha	3 3/19 1 4/30 3 4/3 18 2 3/20	1,500 1 25 25	4/15-80 4/30 4/20-30 4/20-30	a/so	ed Grebe in " in i	2,000 1 25 25
Forruginous Rough-leg Marsh Hawk Gryfalcon	1 3/20 1 3/20 1 4/10	\$ 50	4/30 4/29-30	4/22 5. 4/22 5. 4/10 7. 4	med Hight Seron Hone objer Hittern Mergemeer &	10 50
Prairie Felcon Sparrow Hawk	1 4/17 1 3/29	10	4/20-30	Reporte	d by John R. Frye	1 10

INSTRUCTIONS

(1) Species: Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiiformes)

II. Shorebirds, Gulls and Terns (Charadriiformes)

III. Doves and Pigeons (Columbiformes)

IV. <u>Predaceous Birds</u> (Falconiformes, Strigiformes and predaceous Passeriformes)

- (2) First Seen: The first refuge record for the species for the season concerned.
- (3) Peak Numbers: The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge record for the species during the season concerned.
- (5) Production: Estimated number of young produced based on observations and actual counts.
- (6) Total: Estimated total nu or of the species using the readduring the period concerned.

 Interior—Duplicating Section, Washington, D. C.

82362

Refuge Lostwood

Months of January to April , 194 53

(1) Species	(2) Density		(3) (4) Young Sex Produced Ratio		R	(5) emova	ls	(6) Total	(7) Remarks			
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated	Total	Percentage	Hunting	For Restocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.		
Sharp-tailed Grouse Pinnated Grouse	25,500 acres total habitat	2550	orpodic sdille si us ascur alcessa s	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	everting agr lard type dy s possible. Tegresetts las sporid be	rafi mass mass mass o ad mass	cdwoo to used cous	ed for ed	750			
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	every in evrey.	o sera or yell	bon or 24 sp soi.file	44.5	gng ontersti w soldsmok		toca	bosts eq. ta	an edasibal ise abyloni	(V) REMIKES		
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Form NR-2 - UPLAND GAME BIRDS.*

(1)	SPECIES:		Use	correct	common	name.
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(2) DENSITY:

Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

^{*} Only columns applicable to the period covered should be used.

SMALL MAMMALS

Refuge Lestwood EMOITOUM Year ending April 30, 1953

	manaoro insmeranam s								NR-11 - SMA	Form
(1) Species	Density	redents m d in contr	Rem	(3) ovals	coyot	no no Dis	(4) position of	Fire	tes	(5)
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Cottontail Rabbit Snewshee Rabbit	counts on represen		readō la	etos no bi	sad s		nstilu			50
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List removals by	Predator Animal Hun	er	Deb. Voro	.00 ១៣	in t	nworks so b	Though			*

REMARKS: Of fings to as no betroger setteds dose to nottellucog lated betsetted : MOITAJUGOG LATOT (3)

Share trapping was carried en under Trapping Permits No. 7-7977, T-7978, and T-7979.

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eny other pertinent information not specifically requeshed.

Reported by John R. Frye

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farring.

Longow

Dadger

Portour

Cayota

Managa and Bearer

INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.) Species IstoT(1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc.

SHALL MAMMALS

(Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.)

Refuge Losbwood

(2) DENSITY:

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Common Name Applies particularly to those species considered in removal programs. Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) REMOVALS:

Indicate the total number under each category removed since April 30 of the previous year, including any taken on the refuge by Service Predatory Animal Hunter. Also show any removals not falling under headingslisted.

(4) DISPOSITION OF TUR:

On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market, including furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimeness or damaged condition, and furs donated to institutions or other agencies " List removals by Predator Animal Hunter should be shown in the column provided.

(5) TOTAL POPULATION:

Estimated total population of each species reported on as of April 30.

REMARKS:

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

Share trapping was certicd on under Trapping Persits No. 7-7977, T-7978, and T-7979.

116007

Reported by John R. Fryn

3-1754 Form NR-4 (June 1945)

SMALL MAMMALS

Refuge District 4A Easement Refuges Year ending April 30, 1953

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			Animal Hun				rovi		Ioo e	io th	nwoda e	bfuoi	8	2			

Trapping at Lake Zahl was accomplished under Refuge Permits No. 4-52, 5-52, and 9-52, bus , so his product (1) sets eldess to eats , best to bonden violated at a set of the later of the l any other mertinent information not excellingly requested.

Reported by ____Jehn R. Frys --

INSTRUCTIONS Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.) Disposition of Para

SMALL HAMMALS

Species

Bodger

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[ato](1) SPECIES: Reinge

Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.)

Refuge District 44 Namemont Refe

(2) DENSITY:

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Common Name Applies particularly to those species considered in removal programs. Detailed data may be omitted for species occurring in limited numbers. Leios Zainl Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom Shell Leks land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year, including any taken on the refuge by Service Predatory Animal Hunter. Also show any removals not falling under headingslisted.

(4)

DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market, including furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimeness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided. " Itst removels by Predator Animal Hunter

(5) TOTAL POPULATION:

Estimated total population of each species reported on as of April 30.

REMARKS:

Translan at Lake Sahl was accomplished under Befune Permits No. 6-52, 5-52, and 9-52. Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

116007

REFUGE GRAIN REPORT

Refuge		barron A					Months of	January	thruAp	e il 19	4.53
(1)	(2) ON HAND	(3) RECEIVED	(4)	er Stati		(5) ISPOSED	OF	(6) ON HAND	(7) PROPOSED USE		
VARIETY	BEGINNING OF PERIOD	DURING PERIOD	TOTAL	TRANS- FERRED	SEEDED	FED	TOTAL	END OF PERIOD	SEED	FEED	SURP
Wheat	590	0	590	0	0	20	20	370		370	A
Buckwheat	10	0	10	10	0	0	10	0			
Sweet Clover Seed	600#	0	600#	0	0	0	0	600#	600#		- Karal
Brome Grass Seed	11,240#	0	11,240#	0	0	0	0	11,240#	11,240#		
		this acritical and acritical acritic	bunbels 21 he com nhoss—on 44—60 lbs	Coupe Coupe		en ann Th' hay wheet	TOTAL CONTRACTOR		6. 1ps emputing	OTA	
(8)	Indicate sl	nipping o	r collecti	on points	3						×
. (9)	Grain is s	tored at	Refuge H	leadquart	ers.						
(10)	Remarks					K. Taraka and A.					

NR-8a REFUGE GRAIN REPORT

This report should cover all grain on hand, received, or disposed of, during the period covered by this narrative report.

Report all grain in bushels. For the purpose of this report the following approximate weights of grain shall be considered equivalent to a bushel: Corn (shelled)—55 lbs., Corn (ear)—70 lbs., Wheat—60 lbs., Barley—50 lbs., Rye—55 lbs., Oats—30 lbs., Soy Beans—60 lbs., Millet—50 lbs., Cowpeas—60 lbs., and Mixed—50 lbs. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

- (1) List each type of grain separately: Corn, wheat, proso millet, etc. Include only domestic grains; aquatic and other seeds will be listed on NR-9.
- (3) Report all grain received during period from all sources, such as transfer, sharecropping, or harvest from food patches.
- (4) A total of Columns 2 and 3.
- (6) Column 4 less Column 5.
- (7) This is a proposed breakdown by varieties of grain listed in Column 6.
- (8) Nearest railroad station for shipping and receiving.
- (9) Where stored on refuge: "Headquarters grainary", etc.
- (10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.

LAKE ILO REFUGE.

I. GENERAL

A. Weather Conditions.

Total precipitation for the period at Lake Ilo was above normal. Only the month of March had less than normal precipitation. Early April was dry and we had every indication of a pending drouth; however, over three inches of moisture fell in the latter part of the month and brightened the picture considerably.

The winter as a whole was very mild with the coldest weather occuring in March, and that lasted for only a few days. Very little snow stayed on the ground during the winter; roads were open at all times.

Farming prospects are much more favorable than last spring when no moisture fell during April. This April was colder than normal which delayed farming to some extent; the high precipitation the latter part of the month also delayed farm operations.

Weather data for the period were as follows:

Month	Precipitation	Snowfall	Max.Temp.	Min. Temp.
January	•38	6.3	50	-21
February	•33	2.0	48	- 8
March	1.15	10.0	60	-25
April	3.74	6.0	76	6
Total	5,60	24.3" Ext	remes 76	-25

B. Water Conditions.

The ice level was 26 inches below spillway crest on January 1 and remained that way until March 18 when the run-off started. Run-off was very slight and the lake level raised only four inches to 22" below spillway crest.

The following table shows the water level in relation to spillway crest on various dates.

March	18	-	26	inches	below	spillway	orest
March	19	-	22	W	86	**	100
March	21		16	10	100	10	100
March	23	-	12	98	100	100	10
March	29	-	9	18	11	10	100
April	27	-	7	100	10	10	100
April	30	-	6	98	12	98	R

It is believed that the rain and snow that has fallen the 29 and 50 of April will raise the water so that a small amount will flow over the spillway. This spring has been the first one in which the water did not go over the spill during run-off since it was constructed. Normally water from two to four feet deep goes over.

The ice was 15 inches thick at the beginning of the period and on February 2 it was 20 inches thick; it remained about the same the rest of the winter. A hole was kept open by wintering Mallards and during warm periods wind action would open it larger. It was measured on February 28 and found to be 1/2 mile long and 600 feet wide. All of the ice disappeared from the lake on March 30; this is the earliest that the ice has melted on the lake.

The Lee Paul slough is practically dry this spring as no water entered it through the diversion ditch; it is believed the water level will raise enough to fill it in the next few days due to recent precipitation.

The water appears to be in very good condition even though there was no run-off over the spillway. No fish were lost this winter and the water is very clear, more so than if there had been a large run-off.

C. Fires. None.

II. WILDLIFE

A. Migratory Birds.

dist.

Approximately 450 Mallards wintered on the refuge this winter. Local fishermen seemed to think this is what kept the fish from dying as they kept the water epen! (Other local people that did not care to fish thought it was a shame to let them stay here.) It is believed that the winter loss in the ducks wintering here was very small. Only one duck was found dead near open water and it was believed to have died of lead poisoning. It is believed that no one molested the ducks this winter as there were no complaints of them doing any damage, in fact, there were very few creps such as corn left standing that could have suffered. The field of corn that was left standing on the refuge was completely eaten by them during the winter months.

The first spring migrants appeared on March 17 when nine Pintails and two Green-winged teal were seen. The Mallards began to increase in the next few days. The migration appeared to be larger than average this spring, especially in diving ducks and geese. 66 Canada Geese were observed on the refuge near headquarters on March 18 and several flocks were seen during the next two weeks. More Snow geese used the refuge than usual. A flock of 2000 used the area from April 11 to April 19; only 12 Blue geese were counted in this flock. A flock of 200 Snow geese were on refuge from April 22 to 26. The first Whitefronted geese (200) were seen on April 11.

72 White Pelicans were seen on April 24.

A very large migration of Sandhill Cranes occurred in this vicinity. It is believed there were more than ever observed in the past. Several thousand stopped for a short period on the refuge - a flock of approximately 4000 were observed feeding in a refuge barley field on April 5. 600 were present on April 22.

The shere bird migration has been slow. Franklin's, Ring-billed and Herring gulls have been seen.

B. Upland Game Birds.

It is estimated that 75 Ring-necked pheasants are using the refuge this spring - approximately the same number as at the end of December. It is believed that there was no winter loss in western North Dakota this winter, but their numbers are still much lower than in the past. It is estimated that the pheasant population is less than 50 percent of that of last spring.

Very few Sharp-tailed Grouse have been observed on the refuge or in the nearby vicinity; it is estimated that 15 are using the refuge. Very few Hungarian Partridge have been observed on the refuge ar in the vicinity; probably no more than 10 are present.

C. Big Game Animals.

dis.

None have been observed on the refuge during the period.

D. Fur Animals, Predators, Rodents, and other Mammals.

One permit was issued to trap fur-bearing animals on the refuge. 16 mink and 46 muskrats were trapped and divided on a 50-50 basis; five rats were destroyed by mink in traps. Also trapped were one weasel, one raccoon and nine skunk.

Beaver: Two beaver were trapped near the refuge this winter.
Two were destroyed on the refuge last fall that were doing damage to trees in the Lake Ilo Park. No beaver have been observed on the refuge this spring.

Weasel: One weasel was trapped; a few are using the refuge but their population is low.

Skunk: Very few skunks or signs have been observed on the refuge this spring. 71 were trapped and shot on the refuge from July 14, 1952 to April 30, 1953. Skunks are very numerous in the surrounding area however.

Fox and Coyete: No coyetes have been seen on the refuge, or in vicinity, this period. It is believed their number is very small in

this area. One fox has been seen on refuge during the period and several have been reported in the nearby vicinity. It is believed the fox population is on the increase in this area.

E. Predacious Birds, including Crows, Ravens, Magpies.

A few Golden Eagles were seen on the refuge this period, but their numbers appeared to be below normal. One Bald Eagle was observed; they are seldom seen in this area. A few Prairie Falcons and one Gyrfalcon were seen on the refuge during the period. A number of Marsh Hawks, Sparrow Hawks and Rough-legged Hawks also have been seen during the period.

A large number of crows used the refuge during their migration which started the latter part of March; their usual number have been present since then.

A few Magpies were seen on the refuge during the period. The Magpies are numerous in the Badlands a few miles north of the refuge. Two Horned owls used the area most of the winter. No Snowy Owls were seen during the period.

F. Fish.

Winter fishing was permitted on the refuge from December 1, 1952 to February 28, 1963. The State issued a new proclamation during the first part of December setting the opening of winter fishing Dec. 16, even though our regulations opened it on December 1 in accordance with old State regulations). The fishermen had already been fishing for several days when the new proclamation was announced, so the State Game and Fish Department was contacted; we were informed to continue as originally scheduled, especially since perch fishing was the only fishing to be permitted on Ile anyway.

It was estimated that 2,000 man days of fishing were expended and 60,000 Perch taken during the winter fishing season. A large number of Northern Pike were also eaught but were put back (in most cases, anyway) as the season was not open for taking them. The Northern Pike that were caught measured in length from 15 to 28. According to the size of the Northerns that are present they must have been planted in the late spring of 1951 (the spring when the big winter kill occurred here). We had not been informed by the State of such a planting, nor had we been aware that plans even existed. This was similar to the circumstances of plantings made in 1952.

III. REFUGE DEVELOPMENT - MAINTENANCE

A. Physical Developments.

dis.

The following maintenance and construction projects were completed during the period.

- 1. Completed mounting snow plow on Diamond T truck and hauled it back from Des Laos.
- 2. Pushed snow and weeds off refuge roads.
- 5. Finished inside of office with masonite and installed three new windows and window casing (Job 80 percent complete).
- 4. Posted invitations to bid on Stewart Lake spillway repair Job; Distributed specifications and plans.
- 5. Finished inside of garage with salvaged insulite (80 percent completed).
- 6. Surveyed land tracts 7 and 12 on Lake Ilo Refuge for fencing and posting.
- 7. Hauled coal for heating garage and office at Lake Ilo headquarters (hauled ashes away).
- 8. Trapped and banded 114 ducks from March 8 to 24, 1955 104 Mallards and 10 Pintail.
- 9. Disassembled building (18 by 52') at Lostwood Refuge and hauled it to Lake Ilo Refuge -for use for garage and storage.
- 10. Hauled F-30 tractor from Des Lacs Refuge to Lostwood Refuge.
- 11. Dug up under-ground gasoline storage tank, had it repaired and installed it in new location (after applying two coats of "Rustrum").
- 12. Layed out contouring on farming unit AU-4.
- 13. Worked land for seeding grass and planted 15 acres of grass, clover and alfalfa.
- 14. Made two trips to Stewart Lake Refuge in regards to spillway repair made trip to Des Laos for grass seed.
- 15. Made minor repairs on IHC Pickup #I-16949, Diamond T truck #I-16956 and F-30 tractor I-16834.
- 16. Cultivated trees at headquarters and in Lake Ilo Park. Plowed four acres of new ground for trees at headquarters.
- 17. Repaired refuge boundary fence; checked dam and spillway, water levels and observed binds.
- 18. Checked and divided furs trapped on refuge.

B. Plantings.

Planted 15 acres of grass, clover and alfalfa on SW1 of Sec. 54.

Permit No. 81 - Charles Schollmeyer (55 acres), half of the land will be summer fallowed; other half will be planted to barley and wheat (some corn may be planted on contoured strip instead of summer fallow). All of land has been worked but not seeded to date.

Permit No. 82 - Tom Donahoe, 45 acres barley, wheat and corn. Land worked to start weeds but not seeded to date. 1/2 to 1/5 of land will be summer fallowed. 10 acres of land will be seeded back to grass and clover.

IV. ECONOMIC USES

A. Grazing. None this period.

B. Haying. None this period.

C. Fur Harvest.

A trapping permit was issued to Mr. A. B. Rosendahl of Dunn Center, North Dakota for the taking of Mink, Muskrat, Skunk, Raccom and Weasel. The mink, muskrat and weasel pelts were shared on a 50-50 basis, others all taken by trapper. The total take was 16 mink, one weasel, one raccom, 46 muskrats and nine skunk. The trapper sold his share of mink for \$200.00 and his muskrats for \$28.50. Five of the skunks were sold by the trapper for 50 cents each; the other four were not worth marketing. The Government received \$14.23 for the 22 muskrats and approximately \$168.00 for the 8 mink that were sold to the New York Fur Ametion Co, Minneapelis, Minn.

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Bird Banding.

114 ducks were banded from March 8 to 24. 104 of these ducks were Mallards, the other 10 were Pintails that were trapped during spring migration.

VI. PUBLIC RELATIONS

A. Public Uses.

- 1. Hunting. None.
- 2. Fishing. An estimated 2,000 man-days winter fishing, approximately 60,000 perch taken.
- 5. Miscellaneous Use. The Lake Ilo Recreational Area maintained under cooperative agreement by Dunn County has not been used so far this spring. Those trees have been cultivated that are planted in rows. The rest of the trees are to be cultivated later and more are to be planted (Spruce and Cedar).

DISTRICT IV. EASEMENTS

HIDDENWOOD

I. GENERAL.

Precipitation was near normal during the period (normal to below during January, February and March, above normal in April). The water level is still above normal due to a plug in the culvert under the highway. The water level was 0.8 feet below the top of the culvert when the area was checked on April 19. The plug in the culvert, placed there by local "sportsmen", has been discussed with the County highway engineer but no action has been taken as yet.

II. WILDLIFE.

One trapping permit was issued to a local farmer but no report has been received to date.

The area was visited on March 20 and the lake was covered with ice. On April 19 most of the lake was still frozen over but a few birds were seen - 16 Green-winged Teal, two Shovellers, 30 Mallards and 26 Pintail.

Although none were actually observed it is believed that a few Pheasants, Sharp-tails and Huns are using the area.

III. PHYSICAL DEVELOPMENTS.

1. Observed birds and checked water levels.

LAKE PATRICIA

Not visited during the period.

LEGION LAKE

I. GENERAL.

Precipitation was normal to below normal during January, February and March, above normal during the latter part of April. Very little snow occurred during the period.

At the beginning of the period the water level was 18 inches belew spillway crest. On March 20 a small stream was going over the spillway and on April 18 the water was just at spillway crest.

II. WILDLIFE.

#K

It is believed the usual number of birds used the area during the spring migration. The area was visited on March 20 and on April 18, the following birds were seen: \$\frac{8}{20} = 90 \text{Pintail & 4 Mallard.} \\
4/18 = 2500 \text{ducks (mainly Mallards & Pintails) and 30 White-fronted geese.}

The usual number of Sharp-tails, Huns and Pheasants probably used the area. None were observed on the refuge when visited but a number were observed in the vicinity.

A trapping permit was issued to a local farm boy; no report received to date.

III. PHYSICAL DEVELOPMENTS.

- 1. Structures were inspected and water levels checked.
- 2. Birds were observed on 3/20 and 4/18.

Molean

I. GENERAL.

Precipitation below to near normal during January, February and March and believed above normal during the latter part of April. The water level was 16" below spillway crest at the beginning of the period and two inches were flowing over on March 20; only a small trickle was going over on April 19.

The spillways were checked and appeared to be in good condition. A small amount of wash had occurred om dam; this will be repaired this summer. There were also a few sunken places in the dam that will need repair.

II. WILDLIFE.

Two trapping permits were issued to local farmers and 90 muskrats and one mink were trapped. The muskrat population is believed to be high for the area. It also appears that there are several mink present.

It is believed more ducks used the area this spring than last spring. When visited on April 19, 8,000 ducks were observed: 50 percent Pintail, 40 percent Mallards, 10 percent Canvasback and Scaup (a scattering of Baldpate, Gadwall, Blue-winged Teal and Green-winged Teal).

III. PHYSICAL DEVELOPMENTS.

- 1. Structures and water levels checked on 3/20 and 4/19.
- 2. Birds were observed on April 19.

PRETTY ROCK

I. GENERAL.

The snowfall was below normal this winter and very little run-off occurred. The snow was all gone when the area was visited on March 17 and the water level appeared to be the same as the time of freeze-up (one foot below spillway crest). The area has not been visited since March 17, but, it is believed that the water level should have risen to spill crest during the latter part of April as approximately two inches of rain fell in this locality.

Structures were checked on March 17 and appeared to be in good condition.

II. WILDLIFE.

The area was not visited during the spring migration. On March 17 no ducks were present on the area. A number of Pheasants were observed on the refuge and it is estimated that 75 are using the area

(this is much less than in the past). It is believed a few Sharp-tails and Huns are also present.

Two trapping permits were issued but no reports as to number taken have been received. When the area was visited during the early part of the trapping season the trappers had taken 32 muskrats and 2 mink.

A number of skunk and mink are believed to be using the area. It is also believed the muskrat population is larger than usual.

III. PHYSICAL DEVELOPMENTS.

1. Structures and water level checked on March 17. Trappers were not contacted as they were not at home.

STEWART LAKE

I. GENERAL.

Precipitation ranged from near normal to below normal during the period January - March. Early April was very dry but ever 2.5 inches of rain fell during the last few days of the month.

The water level was three feet below spillway crest at the beginning of the period and 2.5 feet on April 28 - only a six-inch raise during the spring run-off (normally the 85-foot spillway runs water from one to two feet deep).

II. WILDLIFE.

It is believed that fewer waterfowl used the area this period than usually do. On March 17 no ducks were present and most of the area still had an ice cover.

On April 14 an estimated 1800 ducks were present - 25 percent Mallards, 20 percent Pintails, 20 percent Scaup, 10 percent Shovellers, 10 percent Blue-winged Teal and 15 percent Green-winged Teal, Canvas-back, Baldpate and Gadwall.

On April 18 only an estimated 300 ducks were observed, mainly Mallards and Pintails.

The area was visited again on April 28 and only 12 ducks were observed.

It is believed that more Pheasants are using the area this spring than last spring but their number is still small compared with the past. Five hens were seen on the refuge on April 14 and a number were observed in the vicinity on April 28. No Sharp-tails or Huns were observed during the period but it is believed that a few are present.

Two trapping permits were issued to local farm boys but no reports have been received. The muskrat population is very low on this area. It is believed a few coyotes used the area as a few are present in the vicinity. Jack Rabbits are numerous in this locality.

III. PHYSICAL DEVELOPMENTS.

A contract has been awarded to repair the spillway at this easement. A new reinforced concrete out-off wall is to be put in and the rock spillway will be repaired with new riprap and gravel. The Rue Construction Company of Bismarck, North Dakota was low bidder at \$6275.00.

The contractor started moving in equipment on April 27 and started actual work on the 28. Dirt and rock were excavated to grade for the cut-off wall before the heavy rains of April 29 and 30 temporarily suspended activities.

Mr. Dinkins has been assigned to this project as resident inspector and will supervise the work in that capacity.

This easement was visited on March 17, April 14 and 18 to check water levels and to determine working conditions prior to the issuance of a commence-work-order to the contractor.

On April 28 Messrs. Johnston and Wright of the Branch of Engineering and Messrs. Dinkins and Huenecke visited the area for the purpose of setting grade stakes and discussing the work with the contractor.

WHITE LAKE

I. GENERAL.

The precipitation and snowfall conditions are the same as indicated for Stewart Lake (these two refuges are in the same general locality). There was the least run-off this spring of any since the refuge was established. The water level was 3½ feet below spillway at the beginning of the period and 3' below spillway orest after the spring run-off. It is believed the water level raised a few inches during the rain the latter part of April (the area has not been visited since the rain).

The structures were checked and appeared to be in good condition with the exception of a small amount of wash on dike (this will be repaired this summer). A new fence is to be constructed around the dike this spring.

II. WILDLIFE.

On April 14 an estimated 1,000 ducks were observed on the area; these were Mallards, Pintails, Redheads, Canvasbacks, Blue-wings, Greenwings and Shovellers. About 200 Franklin's Gulls were also observed.

The area was visited again late in the evening on April 18 and only a few ducks were observed.

No Pheasants, Sharp-tails or Huns were observed on the area this period.

One trapping permit was issued to a farmer living on refuge but he did not eateh anything. Eight skunks were killed by this farmer near his buildings.

III. PHYSICAL DEVELOPMENTS.

- 1. Structures and water levels checked.
- 2. Proposed fence around dike was layed out and the farmer on the refuge was contacted in regards to building fence.
- 3. Birds were observed.

NOTE: The above report on Lake Ilo and District IV Easements was based mainly on information submitted by Mr. Chesley M. Dinkins, Maintenance Man in charge at Ilo; some data were supplied by the refuge manager.

MATERFOWL

Receive careful attention since these data are necessarily based on an analysis of the rest of the form.

	(1))y not b	more that(3			centratio	ns, depen	5) R moon el	a nat(2)
	Species	First	Seen	Peak Conc	entration	Tast S	seen and		roduced	Total
				1			400	Broods	Estimated	Mathimatine
	Common Name	Rumber	Date	Number	Date	Number	Date	Seen	Total	after the state
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	Whistling swan	Estimate	d number	of young pr	pduced bas	ed on obser	ations an	d actual	ounts on re	Teo-days
II.	Geese:	perroq.				100 mg 10 mg 10				
	Canada goose	The last	reinge :	SCOTISTOL A	5/12-28	during the	Sesson oc	ncerned In	The report	1,500
	Cackling goose			in the second				7891		
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	White-fronted goose	200	4/8	er 200he a	4/19-18	ent in a l	mited int	SLAST OI	CTES 2	3,780
	Snow goose	1000	4/8	2000	4/12-86			W. S.		27,000
	Blue goose	18	aud4/80	muper Mean *		mo ques no.	apply te	1.097 geur	abecies.	280
	(2) First seen:	THE TILL	r Leinke	record for	ne specie	during th	8 68.80M \$	oweerned i	u che rapo	N. LIE
II.	Ducks:		7 5 4	7			1			
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	Black duck	reperen	E berrog	should be a		mobilities si		edal atte	moter about	
	Cadwall	THE MODEL	con to the	200	4/10-00	ay other ap	cles occu	CINE ON I	singe durin	5,000
	Baldpate			1200	4/12-30					\$8,200
	Pintail	9	8/17	5000	4/8-25	- 2	1	100		104,400
	Green-winged teal .	. 2	8/17	200	4/8-18					4,080
	Blue-winged teal		4/16	400	4/19-80	Reported by	P(T) (3 (3)(T)(3)	y M. Dink	196	6,600
	Cinramon teal						- Character No.	a. St. Withouter	and the same of th	
	Shoveller	4	4/15	800	4/19-80					6,600
	Wood duck			14 0 15			- 4			
	Redhead	78	4/8	800	4/12-25					16,280
	Ring-necked duck	1			THE SAME					
otal	Canvas-back	100	4/15	1800	4/19-80	pal nesting	Granta Ci	LS BOLLSON		20,000
	Scaup	200	8/28	4000	4/12-25					90,400
elge	Golden-eye	16000	8/28	80	3/29-4/10			Marine and the second of the s		640
	Buffle-head	3	3/28	80	3/29-4/10					400
	Ruddy duck	20	4/19	100		maeg pl. com	CONTRACTO	TR RHOTE	CHANGE *	780
	Am. Mergenser	19	8/89	200	3/29-4/30			Thursday.		5,280
	nt of waterfowl area		760		Peak 1	sterfowl m	moera		23,0-20	
IV.	Coot :	Home ob	served.							

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SUMMARTES

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Dates waterfowl counts made	wal area covered 100 Peak waterfowl numbers 22,550 Areas used by concentrations Intro area. Principal nesting areas this season Reported by INSTRUCTIONS INSTRUCTIONS In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. en: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species. The greatest number of the species during the season concerned in the reporting period. The last refuge record for the species during the season concerned in the reporting period.								
IV. Coot :	Mens c	beorved.		1					
Percent of waterfowl area	overed _	100		Peak	waterfowl num	bers	2 1	82,550	
Am. Merzenser	. 10			8/88-4/	10				8,250
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Balanar J	6	3/13	INS	TRUCTIONS			1		304,600
Baldpate			7300	4/18-20			-		25,200
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Blue goose	period,	and the n	umber seen	. This-co.					280
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				U TO OZNIKA OV		244 200	10000	PROTERRES	MANAGEMEN
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	of the	migrationa	1 movement	•					

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

receive careful attention since these data are necessarily based on an analysis of the rest of the form.

Note: Wildenwood Months of January to to April 19 58 of the migrational movement. (1)more the (3) has preed or neak (Y) cent (5) a moon (6) Young Produced Species First Seen Peak Concentration Last Seen Total Broods Estimated Estimated Common Name Number Date Number Date Seen Total for period Mumber Date I. Swans: a number of young produced based on observations ar Lectos L ounts on repre-Whistling swan Estimate II. Geese: The last refuge record for the species during the season concerned in the reporting Canada goose HOTE: Figures shown are morely those for birds Cackling goose observed - arises were not visited frequently Brant the Ries pear number of the abscree benough during this period to accurately list White-fronted goose first arrivals, peak of neentrations, etc. Snow goose period, and the tumber seen. This column does not apply to resident species. Blue goose The first refuge record for the species during the season concerned in the reporting 2) First sem: III. Ducks: BO DO tatylospecies of lotal and Marional significance. Mallard reporting period should be aided in appropriate spaces. Special attention should be Black duck In addition to the birds listed on fort, other species occurring on refuge during the Cadwall Baldpate 119 119 Pintail. 16 Green-winged teal Blue-winged teal Cinnamon toal 4/19 Shoveller Wood duck Redhead Ring-necked duck Principal nesting areas this season Canvas-back Scaup Golden-eye Charley In place on up Buffle-head Ruddy duck Areas used by concentrations

Peak waterfowl numbers

Total materiowl usage during period

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Percent of waterfowl area dovered

Dates waterionl counts made

IV. Coot:

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Dates waterfowl counts made	•	Total waterfowl usage during period
Percent of waterfowl area	covered	Peak waterfowl numbers
Dates brood counts made		Areas used by concentrations
Percent of area covered in	brood counts	
Total production:		Principal nesting areas this season
Geese		
Ducks	2 4/19	
Coots	T0 4\T0	Reported by
Baldpate Pintadl	26 4/19	INSTRUCTIONS
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(2) First seen:		for the species during the season concerned in the reporting seen. This column does not apply to resident species.
(3) Peak concentration:	The greatest number of t	the species present in a limited interval of time.
(4) Last seen:	The last refuge record in period.	for the species during the season concerned in the reporting
(5) Young produced:	sentative breeding areas	ng produced based on observations and actual counts on representations. Brood counts should be made on two or more areas aggregating itat. Estimates having no basis in fact should be omitted.
(6) Total:		of the species using the refuge <u>during the period</u> . This figure than that used for peak concentrations, depending upon the nature ment.

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

Wood duck Redhead

Buffle-head Ruddy duck

Dates waterfowl counts made

Canvas-back

Scaup

IV. Coot:

Ring-necked duck

Land Golden-eye Constant In proof Control

Percent of waterlowl area covered

Refuge Months of Lawrence to Anet 19 19

of the migrational movement. (1) may or (5)y not be more tha (3) hat used or peak (V) centrat geber(5) a upon (6) Species First Seen Peak Concentration Young Produced Last Seen Total Estimated Broods Estimated Common Name Mumber Number Date Mmber Date Seen Total for period Date Swans: should be made on Estimated number of young produced based on obser ations an Whistling swan Lauros b ounts on repre-II. Geese: The last refuge record for the species during the season concerned in the reporting Canada goose Cackling goose Bran t The greatest number of the species present in a limited interval of time. White-fronted goose Snow goose period, and the number seen. This column does not apply to resident species. Blue goose The lirst reluge record for the species during the season concerned in the reporting III. Ducks: Mal la rd Elver to those a stree not deited during partor licence. Black duck reporting period should be a des in appropriate spaces. Special attention should be In addition to the birds listed on fort, other species occurring on reluge during Gadwall Baldpate Pintail. MOTTONS Green-winged teal Blue-winged teal Cimpamon teal Shoveller

Principal nesting areas this season

Total materiona usage during period

Areas used by concentrations

Peak Materiowi numbers

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SUM	MAR.	IES.

Dates waterfowl counts made	Total waterfowl usage during period
Percent of waterfowl area	overed Peak waterfowl numbers
Dates brood counts made	Areas used by concentrations
Percent of area covered in	brood counts
Soaup	
Total production:	Principal nesting areas this season
Ring-necked duck	
Geese	
Ducks	
Cinnamon teal	
Coots	Reported by
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Baldpate Pintail	INSTRUCTIONS
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III * Battler to a con a	The Start welves weend for the species during the sensor someomed in the monorting
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(3) Peak concentration:	The greatest number of the species present in a limited interval of time.
(4) Last seen:	The last refuge record for the species during the season concerned in the reporting period.
(5) Young produced:	Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
	Stroods Estimated Estimated
(6) Total:	Estimated total number of the species using the refuge during the period. This figure may not be more than that used for peak concentrations, depending upon the nature
	of the migrational movement.

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

receive careful attention since these data are necessarily based on an analysis of the rest of the form.

of the migrational movement. (6) more the (3) hat use (1) may or (5) y not (5)(4) Last Seen Total Species First Seen Peak Concentration Young Produced Broods Estimated Estimated Seen for period Date Total Common Name Mumber Date Number Date Number Swans : of young produced based on observations and actual ounts on rupreted number Whistling swan II. Geese: HOTH: Pigures show are morely those for birds ecord for t Canada goose Lone objected. observed - areas were not visited frequently Cackling goose enough during this period to accurately list Brant 4/18 er of the species figut errivals, peak omountrations, etc. White-fronted goose The To res Snow goose period, and the number seen. This column does not apply to resident species. Blue goose The first refuge record for the species during the season concerned in the reporting 2) First seen; III. Ducks: 4/18 ecies of local and National significance. 1000 Mal land should be steed in appropriate spaces. Special attention should be Black duck e birds listed on fort, other species occurring on refuge during the In addittion to th Gadwall Baldpate 4/28 1500 MOLIOMS Pintail Green-winged teal Reported b Blue-winged teal Cirnamon teal Shoveller Wood duck Redhead Ring-necked duck Principal nesting areas this season Canvas-back Scaup Below Golden-eye Coasted The Disease Con Line Buffle-head Areas used by concentrations Ruddy duck Percent of materiowl area covered Peak vaterfowl numbers IV. Coot: Total materiowi usage during period Dates waterfowl counts made

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(Sept.1950)

3-1750

Enth,

Dates waterfowl counts made	8	Total waterfowl usage during period
Percent of waterfowl area	covered	Peak waterfowl numbers
Dates brood counts made		Areas used by concentrations
Percent of area covered in	brood counts	
Total production:		Principal nesting areas this season
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Ducks 200		
Cinnamon teal	Ţ	
Coots	-	Reported by
Baldpate Pintail	JSCO C\JS IN	STRUCTIONS
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(5) Young produced:	sentative breeding areas.	produced based on observations and actual counts on repre- Brood counts should be made on two or more areas aggregating
Gomes Marie	10% of the breeding habita	t. Estimates having no basis in fact should be omitted.
(6) Total:		the species using the refuge during the period. This figure n that used for peak concentrations, depending upon the nature

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

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			igration							
	(1)		y not b			or peak (4)		ns, deper(18 na (9)
viegzowa Airschwei	Species	First	Seen	Peak Conc	antration	Last S	een -	Young P		Total
		- 1 -1		91				Broods	Estimated	Estimated
	Common Name	Number	Date	Number	Date	Number	Date	Seen	Total	for period
I.		sentati	e breedl			s should be			areas agg	
	Whistling swan	Estimate	d number	of young pr	pduced bas	ed on obser	rations ar	d actual c	ounts on re	bre-
II.	Geese:	period,		70	To see the		e emergence	er en la lanco		
	Canada goose	Hone of	DO ENTRE OF	ecold for a	BOTES B	Figures at	CHIL CAS III	raly then	for birds	ing
	Cackling goose								ted freque	
	Bran traggers								losurate by	
	White-fronted goose	The gree	test num	er of the s	begres bus	first erri	valu, pos	COMPOSITION S	stons, sto	
	Snow goose									
	Blue goose	parlod,	and the n	miper seen.	This col	mm qoea no.	spply be	L00010502	species.	
	(2) First seen:	The firs	t refuge	record for	the apects	during th	5 5080E C	DEGELORG 1	n the repor	ting
III.	Ducks:	-								
	Mal la rd	3200 m	4/10	ecles of lo	and Ma	Monal sign	ficance.			
	Black duck	reportii	g period	should be a	ided in ap	mopriate s	mcea. Sp	ecial atte	ncion shou	g pe
	Gadwall	IN SECTION	ion to t	e birds lis	red on for	1, other sp	cles occu	raing on 1	singe duris	g the
	Baldpate	40								
	Pintai.l.	4000	4/18	INST	WCTIONS					
	Green-winged teal	50								
	Blue-winged teal	19				Reported by				
	Cinramon teal									
	Shoveller	1								
	Wood duck				-					
	Redhead						-			
	Ring-necked duck	1				1 7	57			
	Canvas-back	400	4/18		LITTE	pal nestin	-FLess co	re seeson		
00.1-2	Scaup	400								
	Golden-eye		HCB				Secretary of the second section of the section of the second section of the se			
	Buffle-head		and the second							
Dercon	Ruddy duck				WIGHO	used by con	COUCLECTO	TS1		2
The A. O.					42300	and here on	and with a			7
Lelos	ant of waterfowl area	OASTED			LOCK	ateriowi m	mate			
	Coot :		,		Date le	manufaced m	ap esta			
	waterford, counts made		-	-	Toper	Waterfowl !	nerka aara	R her ton		
Det or	- t- who is assembly mode	1	,	•	Solo]	mating in	and during	a morelad		•

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Form NR-1

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Dates	waterfowl counts mad	е	Total	waterfowl usage during period
Perce	ent of waterfowl area	covered	Peak	eterfowl numbers
Dates	brood counts made		Areas	used by concentrations
Perce	nt of area covered in	brood counts		
	Scenp	400		
Total	production:	400 4/10	Princi	pal nesting areas this season
	Geese			
	Mood duck			
	Ducks	-		
	Cinnsison teal			D
	Coots	10		Reported by
	Treat peduration rect		NSTRUCTIONS	
	Falapate Pintal]	4000	MOTROOTTONS	
TIT!	(1) Species:		e added in app	n, other species occurring on refuge during the propriate spaces. Special attention should be cional significance.
	(2) First seen:			during the season concerned in the reporting mm does not apply to resident species.
	(3) Peak cencen- tration:	The greatest number of th	e species pres	sent in a limited interval of time.
	(4) Last seen:	The last refuge record for	r the species	during the season concerned in the reporting
II.	Gesnot	period.	i dia bpodico	and make the boundary control the major coming
	(5) Young produced:	Estimated number of young	produced base	ed on observations and actual counts on repre-
T	Syleme r			should be made on two or more areas aggregating
				s having no basis in fact should be omitted.
	(6) Total:			sing the refuge during the period. This figure

Note: Only columns applicable to the reporting period should be used. It is desirable that the Summaries receive careful attention since these data are necessarily based on an analysis of the rest of the form.

of the migrational movement.

3

(1)	msy or	2)A Hot b	HOLE PURCA	Mar used	or peak (4	Teauny entre	na, deper	5) a abou ti	e nat(9)
Species			Peak Conc					roduced	Total.
	9	1			20000	1	Broods	Estimated	Estimated
Common Name	Mumber	Date	Number	Date	Number	Date			for period
I. Swans:	sentati	the same of the sa						STORE SEE	
Whistling swan	Estimat	d number	of young pa	oduced bas	ed on obser	rations an	d actual	counts on re	bre-
II. Geese:	period.								
Canada goose	Home ob	orved.	record for t	to apecies	during the	568.80M CO	ncerned l	the report	gut
Cackling goose					The state of the		H AR H		
Bran taggous									-
White-fronted goose	The gre	test num	er of the s	pecies pre	sent in a l	mited int	JO TRAJE	bine.	
Snow goose									
Blue goose	period,	and the	umber seen.	This col	mm does no	apply to	resident	species.	
(2) First seen:	The fir	t refuge	record for						ting
II. Ducks:			Area not v	isited arte	r main mig	ation had	started.	·	
Mallard	ETARU P	those s	ecies of lo	pal and Ma	sional sign	ficance.	2		
Black duck	reporti	g period	should be a	ulded in an	mopriate a	Baces. Su	ecial att	sation shoul	d be
Gedwall was	In addi-	fion to t	se birds lis	Red on for	a. other sp	ecles occu	ming on	refuge durin	g the
Baldpate Pintail		1	PT 100 TO						
Green-winged teal			TNS	WCTIONS					-
					mahar aan a				
Blue-ving ed teal Cinnamon teal					Reported b	1			
Shoveller	-	·	4						
Wood duck							-		
Redhead	4-			-			-		-
Ring-necked duck									
Canvas-back	I			T. T. TITLE	pal nestin	WY 6000 011	TO DOMDAY		
Scaup				Dadwa	mal markin	avose th	4 600 200	1	
Golden-eye	DECOM COL	TICE		-		-		-	
Buffle-head				1					
Ruddy duck a wage				Areas	used by co	centratio	78		
ercent of waterfowl area	OVETED			Peak	mterfowl n	unbera		-	
IV. Coot:									
lates waterfowl counts made				TO OWN	waterford :		0. 5	The second second second second second	The second secon

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Form NR-1

SULMARIES

(Sept.1950) Interior - Duplicating Section, Washington, D.C. 82449

3-1750

	waterfowl counts made		Total waterfowl usage during period
	nt of waterfowl area	covered	Peak waterfowl numbers
Dates	brood counts made		Areas used by concentrations
Perce	nt of area covered in	brood counts	
Total	production:		Principal nesting areas this season
	Geese	47 U, p	
	Ducks TISE		
	Coots		Reported by
III.	(1) Species: (2) First seen: (3) Peak concentration:	In addition to the birds reporting period should be given to those species of The first refuge record for period, and the number set The greatest number of the	listed on form, other species occurring on refuge during the e added in appropriate spaces. Special attention should be local and National significance. For the species during the season concerned in the reporting en. This column does not apply to resident species. This column does not apply to resident species.
II.	(4) Last seen:	The last refuge record for period.	r the species during the season concerned in the reporting
I.	(5) Young produced:		produced based on observations and actual counts on repre- Brood counts should be made on two or more areas aggregating
	Common Name	10% of the breeding habit	at. Estimates having no basis in fact should be omitted.
	(6) Total:		the species using the refuge during the period. This figure an that used for peak concentrations, depending upon the nature

Note: Only columns applicable to the reporting period should be used. It is desirable that the Summaries receive careful attention since these data are necessarily based on an analysis of the rest of the form.

NO NO

Note: Only columned appendion since there date are necessarily based on an analysis of the rest of the form.

	(1)	may or	y not b	1 1000 (3) net maed	OL Desk (4)	lesotratio	ns deper	5) a mon ti	6 (6)
.,	Species	First	Seen		entration	Last S		Young P		Total
								Broods	Estimated	Estimated
	Common Name	Rumber	Date	Number	Date	Number	Date	Seen	Total	for perio
I.	Swans: Whistling swan	Estimate sentati	d number se breedd	of young pr	pduced bas leged count	ed on obser	mations an	dactual o	ounts on re	pre- legating
II.	Geese:	period.	1 1							
	Canada goose	THE THE	have wante	seord for t	WOUTE.	Pierrae sh		rely them	for birds	gwg
	Cackling goose		SERVICE SPEC		20225				ted freque	
	Bran t Mayou								gewrately	
	White-fronted goose	The gree	test num	er of the s	pecies pre				tions, etc	
	Snow goose				1					
	Blue goose	berlog'	and the	miper seem	This col	mm goes ma	spply to	resident	species.	
	(2) First seen:			record for						Burg
III.	Ducks:	7.					1.,			
	Mal la rd	8 500	P14/34 B	soies of lo	pal and Ma	Monel sign	ficance.			
	Black duck	reporti	E berrog	should be a	ded in ap	propriate s	sces. Sp	eclal atte	ntion shou	g pe
	Gadwall	In seldi	1014/14			a, other sp				
	Baldpate	50	4/14							
	Pintail	400	4/24	INSI	SUCTIONS					
	Green-winged teal	12	4/14							
	Blue-wing od teal	150	4/14			Reported by	la:		Market and the second s	
	Cinnamon taal									
	Shoveller	50	4/24							
	Wood duck									
	Redhead	80	4/24							
	Ring-necked duck									
Total	Canvas-back	28	4/14		Princ	pal nestin	areas th	LS SERBOIL		
	Scaup	400	4/24							}
Perce	Golden-eye constag In	brood con		-						
	Buffle-head									
Dates	Ruddy duck				Areas	used by con	centratio	FB		
	nt of waterfowl area	overed _			Peak	stariowi m	mbers			
	Coot:									
ates	waterfowl counts made				Total.	Materiowi !	sage duri	berted ga		

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Form NR-1

SUMMARTES

(Sept. 1950) Interior - Duplicating Section, Washington, D.C. 82449

Dates	waterfowl counts mad	е			Total waterfowl usage during period
Perce	ent of waterfowl area	covered			Peak waterfowl numbers
Dates	brood counts made				Areas used by concentrations
Perce	ent of area covered in	brood cour	ts		
	Scaup	18()()	4 14		
Total	production:	25	4/34		Principal nesting areas this season
	Geese and	60	4/10		
	Ducks Tier	100	4/16		
	Coots 4 wiles per	180	4/14		Reported by
	Baldpate Pintall	400 20	6/14	INSTRU	CTIONS
III.	(1) Species:	reporting	period sh	ould be add	d on form, other species occurring on refuge during the led in appropriate spaces. Special attention should be l and National significance.
	(2) First seen:				te species during the season concerned in the reporting This column does not apply to resident species.
	(3) Peak concentration:	The great	est number	of the spe	cies present in a limited interval of time.
II.	(4) Last seen:	The last period.	refuge red	ord for the	species during the season concerned in the reporting
I.	(5) Young produced:	sentative	breeding	areas. Bro	duced based on observations and actual counts on repre- od counts should be made on two or more areas aggregating
	Common Name	10% of th	e breeding	habitat.	Estimates having no basis in fact should be omitted.
	(6) Total:				species using the refuge during the period. This figure at used for peak concentrations, depending upon the nature
		of the mi	grational	movement.	

Note: Only columns applicable to the reporting period should be used. It is desirable that the Summaries receive careful attention since these data are necessarily based on an analysis of the rest of the form.

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	s waterfowl counts mad	е	Total waterfowl usage during period
	ent of waterfowl area	covered	Peak waterfowl numbers
Date	s brood counts made		Areas used by concentrations
	ent of area covered in	brood counts	
1010	2000	60 6/28	
Tota:	l production:	20 4/14	Principal nesting areas this season
	Geese	80 4/14	
	Wood duok	78 4/14	
	Ducks	92 4/34	
	Coots	200 4/14	Reported by
	they beging read	nig	
	Pintall	800 6/04	INSTRUCTIONS
	Baldpate		
	(1) Species:		birds listed on form, other species occurring on refuge during the
	Mallard Black duck		hould be added in appropriate spaces. Special attention should be cies of local and National significance.
TITE		green oo onose spe	Cles of food and manional significance.
111	(2) First seen:	The first refuge r	ecord for the species during the season concerned in the reporting
	Blue goose		mber seen. This column does not apply to resident species.
	Snow goose		
	(3) Peak concen-	The greatest number	r of the species present in a limited interval of time.
	tration:		enough duging this period to accurately list
	(4) Last seen:	The last refude re	cord for the species during the season concerned in the reporting
TTO	(4) 1250 00011	period.	cold for the opecies daring are boason concerned in the reporting
	(5) Young produced:	7 7 7	f young produced based on observations and actual counts on repre-
	SWELLE ;		areas. Brood counts should be made on two or more areas aggregating
	Common Name	10% of the breedin	g habitat. Estimates having no basis in fact should be omitted.
-	(6) Total:	Fetimeted total men	mber of the species using the refuge during the period. This figure
	(O) TO GAL!		more than that used for peak concentrations, depending upon the nature
AND DESCRIPTION OF THE PERSON NAMED IN	Nº /	of the migrational	

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

Apple

Note: Only column Beings on Muite Torm repeating pe Mouths of Agence. It is do to a try at the 10 miles receive careful attention since these data are necessarily based on an analysis of the rest of the form.

				al movement.						
	(1)	may or (5	y not be	more tha(3)	that used	for peak (7	eentratio	ns, depen		e na (6)
-	Species	First	Seen	Peak Conce	ntration	Last S	Seem		roduced	Total
		4			5			Broods	Estimated	Estimated
	Common Name	Kimber.	Date	Number	Date		Date		Total	for period
I.			e breedin	g areas. B						
	Whistling swan	Estimate	d number	of young pr	pduced bas	ed on obser	ations an	d actual o	omits on re	DL9-
		10.15			the state of					
II.	Geese:	period.		A Third was	Alexander and the	1				
	Canada goose	None obt	erved.	ecord for &	HOTE!				for birts	
	Cackling goose			N N N N N N N N		Opsorved .	areas we	so not vie	ted freque	MATA
	Bran to a cross				Managar San al	enough da	ing this	SPICE SO	courately	7708
	White-fronted goose	The great	test numi	er of the s	sentles pre	TOTAL CITY	ASTR DOS	I COMPOSED	ARODE ARC	•
	Snow goose			Annual Statement			and from the		- harmon à	
	Blue goose			AMOST ROWN						A 100 100
***	(2) First seen:	The First	t refuse	recerd for	bas aneche	during th	season e	mmermed 1	n the renor	ting
III.	Ducks: Mal.lard	Owner to	and the said		Section of the sectio	TANK ATOM	TO STATE OF			
	Black duck	260	4/14	should be an		Honel sign	finesice.	DATES MAAA	NAME OF TAXABLE PARTY.	or no
	Cadwall	The second of	o partod	e birds lis	ided in an	monniate a	POTOS POCO	rang ou	parage data	g are
	Baldpate		(00 40 6)	a Mada Ha	ched my Power	dibon an	02 00 5003	and his con	apande dundy	w the
	Pintail	200	4/14	DASI				7-7		
-	Green-winged teal	200	6/74	Janes da	er en	-		-	and the same being	
	Blue-winged teal	100	4/34		-	Reported b	and the state of the state of the state of			Artist Control of the
	Cinganon teal	250		•		Bearing to he				
	Shoveller	78	4/34	- *** - * , h _ l						
	Wood duck		4/34		-					
	Redhead	50	4/14							
	Ring-necked duck	() : 1 w								
Total		80	4/14		LLTDO		STAND PIL	re agraon	-	
m-4-7	Scaup	80	4/14							
	Golden-eye			Name and Address of the Owner, which we have	and the secondary		and the second second	reministration of the local section of	-	
	Buffle-head		7				1	1.0		
THICOS	Ruddy duck		and the same of th		ATGES	meed by col	CSUCTRCIO	78	-	2
-		1 1	IF.						. "	
Herce	nt of waterfowl area	OASTEG		Market Warner of Corne	FORK	steriowi n	unoers			The second secon
	Coot:				2			*		
	waterfowl counts made	-			Total	waterfowl .	resse ama	ag bearon	-	
-		4			40.4.3				•	•

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Form NR-1

(Sept.1950) Interior - Duplicating Section, Washington, D.C. 82449

Percent of waterfowl area covered Peak waterfowl numbers Areas used by concentrations Percent of area covered in brood counts Total production: Geese Ducks Coots INSTRUCTIONS (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species. (3) Peak concentrations Areas used by concentrations Principal nesting areas this season Reported by INSTRUCTIONS The species of local and National significance. The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
Principal nesting areas this season Geese Ducks Coots Reported by INSTRUCTIONS (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
Total production: Geese Ducks Coots In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
Total production: Geese Ducks Coots INSTRUCTIONS In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
Ducks Coots Reported by INSTRUCTIONS (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
Ducks Coots Reported by INSTRUCTIONS (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
Coots Reported by INSTRUCTIONS (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
Coots
INSTRUCTIONS In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
INSTRUCTIONS (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
(1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
(1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
(1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
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(2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
(2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
period, and the number seen. This column does not apply to resident species.
QUOM ROOMS
() LOOK CELLCELL THE KLOCKED HOMBEL OF MIC SPECTED BLOCKED IN C THILD AND AND AND AND AND AND AND AND AND AN
presitration:
Cackling goose abserved areas ways not visited frequently
(4) Last seen: The last refuge record for the species during the season concerned in the reporting
II. Geere:
(5) Young produced: Estimated number of young produced based on observations and actual counts on repre-
(5) Young produced: Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating
10% of the breeding habitat. Estimates having no basis in fact should be omitted.
(6) Total: Estimated total number of the species using the refuge during the period. This figure
may or may not be more than that used for peak concentrations, depending upon the nature
of the migrational movement.

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

Appl

3-1751 Form NR-1A (Aug. 1952)

ON2

MIGRATORY BIRDS

(Other than Waterfowl)

Months of to April Lake Ilo Refuge Refuge.....

(1) Species	(2) First Seen	(3) Peak Concentration	(4) Last Seen	(5) Production	(6) Total
Common Name	Number Date	Number Dates	Number Date	Number Total # Total Colonies Nests Young	Estimated
I. Water and Marsh Birds: Sandhill Crane Unite Policen Creat Blue Boren	78 4/21 None observed.	4/5-10 4/50-30	600 78 4/22 4/88	I. German	780
II. Shorebirds, Gulls and	klist, 1951 Edition etc. In addition e reporting period	STRUCTIONS in the A 0.U. Chec "seagull", "tern", on refuge during th ion should be given er and March Birds	d general terms as species codurring s. Special attent	order, Avoi	(1) Spe
Avorat east of but a sure Reserving Gall treesed Ring-billed Gall Franklin Gall	e del ting 10 the application of	80 4/30-80 4/30-80 4/30-80 4/20-80	TV. Pre praction record for more and inclusive	k Numbers: Estimated nu	(3) Pag
	vations and actual	species during the	aber of young prod	duction: Estimated au	(5), Pro
of refuge during the	days present)	rage population X (revo)	otes tys use (sv	Est mated sp paporting pe g Section. Weshington, D. C.	

(1)	(2)	(3)	(4)	(5)	(6)
III. <u>Doves and Pigeons</u> : Mourning dove White-winged dove	Home cheerved.	RATORY BIRDS than Waterfowl) Months of Canuary		Refuge Ilo	Form NR-1A (Aug. 1952)
IV. Predaceous Birds: Golden eagle Duck hawk Horned owl Magpie Raven Crow	General S/18 General S/22 General S/22 4/20 General S/26	### 1/1-2/50 ###################################	COOL C. etsG	m Name Sirds: Si	Special Common Action of the C

(1) Species:

INSTRUCTIONS (See Sec. 7532, Wildlife Refuges Field Manual) Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiiformes) woodifau

II. Shorebirds, Gulls and Terns (Charadriiformes)

III. Doves and Pigeons (Columbiformes)

IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)

(2) First Seen: The first migration record for the species for the reporting period.

Estimated number and inclusive dates when peak population of the species occurred. Peak Numbers:

The last refuge record for the species during the season concerned. Last Seen:

Estimated number of young produced based on observations and actual counts. Production:

Estimated species Tys use (average population X r days present) of refuge during the (6) Total: reporting period.

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Ilus e'military

Form NR-2 (April 1946)

Refuge Matrict - 10 ments of the second was a super the second of the se

(1) Species	(2) Density	(3) Young Produced	TO TOUR WELLIN	(5) Removals	Total	(7) Remarks
Common Name	Cover types, total p	Number broods obs'v'd.	Percentage		Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
ice (1/0 Steadors Starp-tailed by Surgarian Parts	d deture. Examples to thom and hardwest.	one parte en the general culture land, to listed in ligures shoult	pes ghodid je ch as to obscr reverting agr dard type symi e possible.	sto. Ster be used wher	15 Lore 10 . of	No winter loss.
DEFENCED Monant herp-tailed fr Imgarian Partr	er Remarks	in Mostel und	ed bluode sas	e tres or as	Iques lo esta	(3) YOUNG PRODUCED:
RE PATRICIA Beasent harp-tailed Gr ungeries Partr	ab ebuloni ,ote ,etc.		.0	idaliava li	s mulos sidī se beq Wedio	(4) SEX HATIO: -Defaulted (5) EEMOVALG:
Dies LANE Heapen's harp-balled Gr mgarism Parkr	Mgo re l'arravo.	edi dini guli ation solare	us those migrads	ent birds pl	10	(7) REMARKS:
LEAN hearent harp-tailed Gr engarien Partr	Puso	vilse filos pa	ter moitserrole	pertinent is	30	* Only columns applic
1913)	

INSTRUCTIONS to I am to a series a seri

Form NR-2 - UPLAND GAME BIRDS.*

(1)	SPECIES:	Use	correct	common	name.
					-

Junery to drait , 194 58

(2) DENSITY:

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Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) YOUNG PRODUCED:

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- Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO:
- This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS:
- Indicate total number in each category removed during the report period.
- (6) TOTAL:
- Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS:
- Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

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^{*} Only columns applicable to the period covered should be used.

Shero-telled Orders

Refuge District IV Essents, as lists INSTRUCTIONS THE SOLUTION OF THE SOLUTION

Form NR-2 - UPLAND GAME BIRDS.*

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		(5) (6)	(2)	101	(2)	(1)
(1)	SPECIES:	Use correct common name.	Sex Sex	Young	Density	Species

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series

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^{*} Only columns applicable to the period covered should be used.

Form NR-2 (April 1946)

Refuge District IV Ensements, as listed Months of January to April , 194 58

Form NR-2 - UPLAND GAME RIBBS. # (3) (4) (1) (2) (5) (6) (7) Young Sex ₹ Species Total Density Removals Remarks Produced Ratio oval programs (pul Number broods obs'v'd. Estimated Total For Re-stocking For Research Estimated bedimil ni uniruoso Hunting cover types. This number Pertinent information not Acres Cover types, total specifically requested. using per aced by a s erid d Common Name | acreage of habitat Bird Percentage Refuge List introductions here. PRINTER ROCK bimon's sec Tavob To Pheasants to mich as to ob kism & hat Estimated. Sharp-tailed Grouse e salduever Benessian Partriage Standard type s Mati Lautos do bessd ad bluode hetthinds where possible. ESS : STRUCK Dethod us be an bodien vevue asets evi the enresent PROPERTY. bluode sasts w siones h 20 Retimeted. under in BeTA Remarks. deste Sharp-tailed Grosse Eugarien Partrilgo Inditos bas anot svieude dogu bean coung produced. to redsum bedratt .Jedlded balber in representative br WHITE PARE Bet imeted. PROPERTY. rimarily to wild turley, passants, etc., Include data on This column applies Sharp-tailed Grosse i as pegs Today Rungarian Partrillas bolred in each category removed furing the report period. Indicate total Estimated total number using the refuge during the report period This may (6) TOTAL: anchaes distres privile religion into the plant and sold sold and mebiter epulant Indicate method used to determine population and area covered in survey. beteauper vilasificers ion notisarrolni inentifically requested. best of blueds bereves being of sidebilgus sumulos vino *

Sharp-walled Orders

Refuge Pictrict IX Executions list SNOTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.*

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^{*} Only columns applicable to the period covered should be used.

SMALL MAMMALS

District IV Basements as listed. Year ending April 30, 1968

(1) Species	Density	d in cont	Remov		notal ago (4) to a Disposition of		(5)
diron lame	Cover Types & Total Acreage of Habitat	Acres	Fur Harvest Predator	Control * For Re- For Re- search	Share Trapping Permit di july Number ji ya	Total Refuge Furs Shipped Furs Donated Furs Destroyed	Popula- tion
Cotton tail Rabb Jack Rabbit	significant changes of detailed enough to fur becure the general pic rting agriculture land fard type symbols list where possible. Itsel	sould be to o dear sould be seen sould be used to seen seen seen seen seen seen seen see	0 0 0 0 0 0 0 0 1	oressed in action as a state of the second of the control of the c	The provided Heart of the state		200 10 0 12 2 10 2 0 10 40 3
Mink Coyote Lambna Shunk Bedger Weasel and Soften tail Rabb Jack Rabbit Red Fox palores	emoved since April 30 by Service Predatory er beadingslisted. iqqari mo i aqer oN capper's share, and re	to date of the state of between			Indicate 0041-8, to previous year, to Enter. Also sh	RIMOVALS:	01 (3). 00 00 00 00 00 00 00 00

Indicate inventory method(s) used, size of sample area(s), introductions, and .befseuper vilasitioses for noliserolat inentify requested.

Reported by Chesley M. Dinkins

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Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for (5) estimated total population of each species considered in control operations.)

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Leso(1) SPECIES:

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Disposition of Eure

Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.)

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DENSITY: (2)

BEE

Applies particularly to those species considered in removal programs. comes Mana Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) REMOVALS:

Indicate the total number under each category removed since April 30 of the previous year, including any taken on the refuge by Service Predatory Animal Hunter. Also show any removals not falling under headingslisted.

DISPOSITION OF FUR:

On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market, including furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimeness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided. a last removals by Fredator Animal Hunter

TOTAL POPULATION:

Estimated total population of each species reported on as of April 30.

REMARKS:

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested. 116007

Chesley M. Dinkins Reported by

SMALL MAMMALS

Refuge District IV Easements as listed: Year ending April 30, 1955

(1)	Density	nebon iii o ni bere	(3) Removals	soyove.	to notasingood	4) of Fur		(5)
Species Common Name	Cover Types & Total Ac	cres Per ung	irrel, fox sever	For Re-	Share Trapp Share Trapp Remit 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	3	one ted	Popula-, tion
House Cat Badgor Gettem tail Rabb: Jack Rabbit Muskrat Mink Skunk	o obscure the general pio everting agriculture land tandard type symbols list sed where possible. Figu	ed scept a sce	bu not so make name of the prefire name of the name of the start of th	In each need n r types cmation s swenp short g ant Ser basel	#70 a All 71 a 1400	CC it it it it it it in in		100 6 10 10 4 8 100 6
uge share, y Service unprime- gencies	OF final sonts become to the constant solves of such a sont sont sont sont sont sont sont sont	rading falling to the restrict to mark	g aty taken or removale not : lat the permit	ncludin bw any fure l for of longine	evious year, inter. Also sh sharq-trapped	E E E E C C E E E E E E E E E E E E E E	RIMOVALS: DISPOSITION	(g) 6 8 (u)

Indicate inventory method(s) used, sive of sample area(s), introductions, and any other pertinent information not specifically requested.

Reported by Chesley M. Dinkins

SMALL MAMMALS (Include date on 11 am

Species

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HIMAHES:

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

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Into(1) SPECIES:

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Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.)

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TOTAL POPULATION:

Estimated total population of each species reported on as of April 30.

REMARKS:

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested. 116007

Reported by (Besley H. Pinkins

SMALL MAMMALS

RefugeDistrict IV Essenents as listed:

Year ending April 30, 1958

(1) Species	Density	Removals	Disposition of		(5)
daron same	Cover Types & Total Acreage of Habitat Ani	r rrest edator ntrol r Re- ocking	Share Trapping Share Trapping Line Share Trapping Number Line Share Share Trapping	Total Refuge Furs Shipped Furs Donated Furs Destroyed	Popula- tion
Muskrat Mink Weasel Badger Jack Rabbit dates Skunk Mink Mink Skunk Weasel Jack Rabbit Goyote	t as significands, reduce to the detailed enough to the to obscure the general picture land reverting agriculture land Star tard typedal started Star used where possible. Figuration	d by a statement from ch cover type found of not be repeated exce es. lower types show on but not so such as up, upland hardwords, grass prefits etc. eries No. 7 should be	The series of covering		800 10 10 4 80 10 10 18 4
Musicrat Inmina Mink Skunk	White lake to be worth the wind to be wind t	y removals not falltr	Hater, Age alow an	REMOVALS:	10
Jack Rabbit of vo	Predator Animal Hunter	f pelia alippel to ma her o pelta of each	Isdicate the number of personnel. Total number of number	10 101111101210	20

REMARKS:

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested. liscor

Estimated total population of each species reported on as of April 30.

TOTAL POPULATION!

Chesley M. Dinkins

Reported by

STANSIAN ATANS

Referenced VI Johnstolfenered

INSTRUCTIONS Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.) Disposition of Arra Species [ado(1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. Formula-(Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.) tion DENSITY: (2) Applies particularly to those species considered in removal programs. Common Heme-Detailed data may be omitted for species occurring in limited numbers. 608 Density to be expressed in acres per animal by cover types. This informa-OF tion is to be prefaced by a statement from the refuge manager as to the O.E. LOBERT number of acres in each cover type found on the refuge; once submitted, 4 this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be 03 indicated under Remarks. REMOVALS: Indicate the total number under each category removed since April 30 of the previous year, including any taken on the refuge by Service Predatory Animal Hunter. Also show any removals not falling under headingslisted. 10 DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share Indicate the number of pelts shipped to market, including furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimeness or damaged condition, and furs donated to institutions or other agencies

should be shown in the column provided.

TOTAL POPULATION: (5)

Estimated total population of each species reported on as of April 30.

REMARKS:

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested. 116007

Itst removals by Reseator Animal Hunter

Georgey M. Mukins Reported by

REFUGE GRAIN REPORT

Refuge Lake Rlo							Months of	January	through	April	, 195_
(1)	(2) On Hand Beginning of Period	(3) RECEIVED DURING PERIOD	(4) Total	(5) Grain Disposed of				(6) On Hand	(7) Proposed or Suitable Use*		
Variety*				Transferred	Seeded	Fed	Total	END OF PERIOD	Seed	Feed	Surplus
Wheat	78	-	76	-	-	80	50	45	-	45	
Barley	80	cioc 🛶 14	80	er fablise	PT.	10	10	20		20	-
Spelts & Wheat (Mixed)	191	intalae for erost ya irr ere kû n el	191	osiquetro o spilippe crobe	is Sur <mark>es</mark> id. El surg scop	10	10	181	-	181	-
	(4) A (4) A (4) (4) (4) (4) (4) (4) (4) (4) (4) (4)	arvest from stal of echa and 6 less refer prep			roager eq.		such or tra	5. Indicals	si gram is		
	(B) Eq.	rbna corn. Mo, new di Munot soft Mex resolu	parties when a curripons, co, he apen a hackeds	E. red Win Librate and In netally a mix deposit	where do		a office work	au, Brase suff Di in legiti de rour ur inseg e miju be bese stem interes	el, combinio i specionen supplies to il capit a romare on		
	the same in	20 10" 13	fraguraten 1 - aquivaten 	to on pr	and pentra-	report the shelled) - -60 Hz, i The colors io, as Pin	Tollowing For joy, corn mily: For it corntains (co	fear) = 10 I compara (tear) = 10 I fear (tear) = 10 I	- CA		
(8) Indicate shipping of	Ent Val	one sprong s			Luceral	ns ugaban	ed of anth	t the best i			
(9) Grain is stored at 10) Remarks											
*See instructions on back											16-61482-1

REFUGE GRAIN REPORT

This report should cover all grain on hand, received, or disposed of, during the period covered by this narrative report.

Report all grain in bushels. For the purpose of this report the following approximate weights of grain shall be considered equivalent to a bushel: Corn (shelled)—55 lb., corn (ear)—70 lb., wheat—60 lb., barley—50 lb., rye—55 lb., oats—30 lb., soy beans—60 lb., millet—50 lb., cowpeas—60 lb., and mixed—50 lb. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

- (1) List each type of grain separately and specifically, as flint corn, yellow dent corn, square deal hybrid corn, garnet wheat, red May wheat, durum wheat, spring wheat, proso millet, combine milo, new era cowpeas, mikado soy beans, etc. Mere listing as corn, wheat, and soybeans will not suffice, as specific details are necessary in considering transfer of seed supplies to other refuges. Include only domestic grains; aquatic and other seeds will be listed on NR-9.
- (3) Report all grain received during period from all sources, such as transfer, share cropping, or harvest from food patches.
- (4) A total of columns 2 and 3.
- (6) Column 4 less column 5.
- (7) This is a proposed break-down by varieties of grain listed in column 6. Indicate if grain is suitable for seeding new crops.
- (8) Nearest railroad station for shipping and receiving.
- (9) Where stored on refuge: "Headquarters granary," etc.
- (10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.

16-61482-1 U S. GOVERNMENT PRINTING OFFICE